

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Previously Presented) A method to improve quality of black and white images of tag-based color imaging systems in a color image path, comprising:
  - a) receiving data processed from an input image;
  - b) receiving image analysis tags associated with the pixels of said input image data;
  - c) providing said tags to each channel of said image processing module to control image processing;
  - d) performing image processing on said image data to provide a video signal output thereof;
  - e) replicating said video output signal on all output channels of said image processing module;
  - f) merging each video signal from each of said output channels based on the tags; and
  - g) outputting said merged video signal.
2. (Previously Presented) A method to improve image quality as in **claim 1** wherein the tags are determined from one or more characteristics of the image through segmentation.
3. (Previously Presented) A method to improve image quality as in **claim 1** wherein the received data processed from said input image is obtained from a memory.

4. (Previously Presented) A method to improve image quality as in **claim 1** wherein said tags are generated in an image analysis module.
5. (Previously Presented) A method to improve image quality as in **claim 4** wherein said tags describe for each pixel its classification (e.g., continuous tone, low frequency halftone, high frequency halftone, text, etc).
6. (Previously Presented) A method to improve image quality as in **claim 1** wherein said image processing includes filtering, Tonal Reproduction Curves or TRCs, and rendering based.
7. (Previously Presented) A method to improve image quality as in **claim 1** wherein different de-screen filters with various cut-off frequencies and enhancement filters are applied to the image based on pixel classification.
8. (Previously Presented) A method to improve image quality as in **claim 1** wherein said image processing comprises multiple resources to enhance image quality.
9. (Previously Presented) A method to improve image quality as in **claim 1** wherein additional channel modes are utilized in a CMYK image path for processing in 3-channel color space.
10. (Previously Presented) A method to improve image quality as in **claim 1** wherein a 4<sup>th</sup> channel provides resources for the luminance channel.

11. (Previously Presented) A method to improve image quality as in **claim 1** wherein additional channel modes are utilized in a color image path for processing in 1-channel Black and White mode.
12. (Currently Amended) A system for improving the quality of black and white images in a color image path of tag-bases color imaging systems, comprising:  
at least one processor in communication with a storage device;  
sufficient software and hardware to perform:  
a) receiving data processed from an input image;  
b) receiving image analysis tags associated with the pixels of said input image data;  
c) providing said tags to each channel of said image processing module to control image processing;  
d) performing image processing on said image data to provide a video signal output thereof;  
e) replicating said video output signal on all output channels of said image processing module;  
f) merging each video signal from each of said output channels based on the tags; and  
g) outputting said merged video signal on; and  
h) a device for rendering said merged video signal.
13. (Currently Amended) A system for improving image quality as in **claim ~~11~~ 12** wherein the tags are determined from one or more characteristics of the image through segmentation.

14. (Currently Amended) A system for improving image quality as in **claim 11** **12** wherein the received data processed from said input image is obtained from a memory.
15. (Currently Amended) A system for improving image quality as in **claim 11** **12** wherein said tags are generated in an image analysis module.
16. (Previously Presented) A system for improving image quality in **claim 15** wherein said tags describe for each pixel its classification (e.g., continuous tone, low frequency halftone, high frequency halftone, text, etc).
17. (Currently Amended) A system for improving image quality in **claim 11** **12** wherein said image processing includes filtering, Tonal Reproduction Curves or TRCs, and rendering based.
18. (Currently Amended) A system for improving image quality in **claim 11** **12** wherein different de-screen filters with various cut-off frequencies and enhancement filters are applied to the image based on pixel classification.
19. (Currently Amended) A system for improving image quality in **claim 11** **12** wherein said image processing comprises multiple resources to enhance image quality.
20. (Currently Amended) A system for improving image quality in **claim 11** **12** wherein additional channel modes are utilized in a CMYK image path for processing in 3-channel color space.

21. (Currently Amended) A system for improving image quality in **claim 41 12** wherein a 4<sup>th</sup> channel provides resources for the luminance channel.
22. (Currently Amended) A system for improving image quality in **claim 41 12** wherein additional channel modes are utilized in a color image path for processing in 1-channel Black and White mode.